



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,898	10/19/2001	Tominari Nomura	Q66830	7310

7590 11/16/2005
SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3202

EXAMINER

NGUYEN, SIMON

ART UNIT	PAPER NUMBER
----------	--------------

2685

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/981,898

Applicant(s)

NOMURA ET AL.

Examiner

SIMON D. NGUYEN

Art Unit

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-16 is/are allowed.
- 6) ☒ Claim(s) 1-11 and 17-20 is/are rejected.
- 7) ☒ Claim(s) 21-26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 8, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al. (Reg. Number H1,897) in view of Ying (6,757,521).

Regarding claims 1, 3, 8, 17, Fletcher discloses a centralized maintenance management for a portable telephone system via an internet (abstract, figs.1-3, column 11 lines 1-12), comprising: accessing an information providing server of maintenance management center from a maintenance terminal (operator) performing fault diagnosis and recovery operations of the telephone system (fig.3, column 15 line 66 to column 16 line 25, column 17 lines 4-29). However, Fletcher does not specifically disclose the step of searching a database server in which fault data and a diagnosis dictionary are stored through the server to acquire fault diagnosis and fault recovery.

Ying discloses a method and system for diagnosis and maintenance vehicle, comprising: portable diagnostic terminal 730 remotely accessing the appropriate diagnostic and maintenance information stored in the diagnostic and maintenance information database 780 (column 11 lines 13-25). Therefore, it would have been obvious to those skilled in the art at the time the invention was made to have Fletcher,

Art Unit: 2685

modified by Ying to allow a repair technician wirelessly accessing the fault/diagnosis information which is potentially less time consume and more accuracy to troubleshoot a problem than the conventional way.

3. Claims 1, 3, 8, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al. (Reg. Number H1,897) in view of Bortcosh et al. (5,983,364).

Regarding claim 1, Fletcher discloses a centralized maintenance management for a portable telephone system via an internet (abstract, figs.1-3, column 11 lines 1-12), comprising: accessing an information providing server of maintenance management center from a maintenance terminal (operator) performing fault diagnosis and recovery operations of the telephone system (fig.3, column 15 line 66 to column 16 line 25, column 17 lines 4-29). However, Fletcher does not specifically disclose the step of searching a database server in which fault data and a diagnosis dictionary are stored through the server to acquire fault diagnosis and fault recovery.

Bortcosh, in an diagnosing computer fault, discloses a remote unit (maintenance terminal) searching a database server in which fault data and a diagnosis dictionary are stored through the server to acquire fault diagnosis and fault recovery (fig.1, column 4 lines 18-33). Therefore, it would have been obvious to one skilled in the art to use the diagnosing computer fault of Bortcosh in the centralized maintenance system taught by Fletcher in order to implement the fault diagnosis and recovery operations in the portable communication system.

Regarding claim 8, this claim is rejected for the same reason as set forth in claim 1.

Regarding claim 17, this claim is rejected for the same reason as set forth in claim 1, wherein Fletcher further discloses a plurality of portable telephones connected to a fixed telephone network (fig.1).

Regarding claim 3, Bortcosh further discloses diagnosis file stored in the database server (column 4 lines 17-34, 51-64).

4. Claims 2, 9-11, 18-20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al. (H1,897) in view of Bortcosh et al. (5,983,364) as applied to claim 1 above, and further in view of Siegel et al. (6,782,345).

Regarding claims 2, 9-11, 18-20, the modified Fletcher does not specifically disclose one or more remote maintenance and engineering terminal, a request for supporting of a maintenance operation, and updated diagnosis file.

Siegel discloses a third party or a customer service engineer operating on-line from a remote place (fig.2, column 2 lines 8-67, column 7 lines 48-67, column 11 lines 17-39), and a request for supporting of maintenance operation to a remote diagnostic system 300 when it determines that further analysis is required (column 7 line 30 to column 8 line 31) and updated diagnosis file (column 1 line 58 to column 2 line 43, column 9). Therefore, it would have been obvious to one skilled in the art to have modified Fletcher, modified by Siegel to remotely troubleshoot a problem in order to save time and cost of service.

5. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al. (H1,897) in view of Bortcosh et al. (5,983,364) as applied to claim 1 above, and further in view of Torch et al. (5,920,846).

Regarding claims 2-6, the modified Fletcher discloses collecting and recording information in the database server. However, the modified Fletcher does not specifically disclose issuing of a repair request, completion report, process situation report, maintenance schedule.

Torch discloses issuing of a repair request, completion report, process situation report in a method of maintenance or repair of telecommunication service (abstract, column 55 lines 32-38, column 80 line 1 to column 81 line 28, column 82 line 32 to column 83 line 40). Therefore, it would have been obvious to one skilled in the art to have a modified Fletcher, modified by Torch to lay out the repair processing order to prevent mistakes that may be caused by a maintenance technician in dealing with the repair service.

6. Claim 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al. (H1,897) in view of Bortcosh et al. (5,983,364) and Torch et al. (5,920,846) as applied to claim 5 above, and further in view of Bowman-Amuah (6,345,239).

Regarding claim 7, the modified Fletcher fails to disclose an inventory management calculating inventory based on maintenance service.

Bowman-Amuah discloses the inventory based on maintenance schedule (figs.31-32). Therefore, it would have been obvious to one skilled in the art to have a modified Fletcher, modified by Bowman-Amuah in order to prevent lack of parts for repairing service.

Allowable Subject Matter

7. Claims 21-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 21, the prior art of record fails to teach the step of registering a repair return date into the repair request data of the database server.

Regarding claims 22-26, these claims are objected as being dependent upon dependent claims that have been objected.

8. Claims 12-16 are allowed.

Regarding claim 12, the prior art of record fails to teach the step of registering a repair return date into the repair request data of the database server and inputting a printing instruction of a repair tag card to be applied to the repair article and sending to the repair center.

Regarding claims 15, the prior art of record fails to teach the step of performing fault occurrence prediction and determining a failure ratio, calculating required

quantities of spare apparatus and panels and storing the required quantities as predictive maintenance schedule data.

Regarding claim 16, the prior art of record does not specifically disclose the step of delivering apparatus and panels corresponding to a shortage into a distribution center.

Regarding claim 13-14, these claims are allowed as being dependent upon independent claim that has been allowed.

Response to Arguments

9. Applicant's arguments filed 8/24/05 have been fully considered but they are not persuasive.

Bortcosh fails to disclose "data for fault diagnosis and fault recovery is not acquired by the maintenance terminal".

Bortcosh teaches a fault-diagnosis system having a database for storing file sets, which constitutes a knowledge-base module about a particular problem area wherein each file set contains a diagnostic set; an expert system unit uses file set contains the diagnostic for each case or problem to be diagnoses (column 5 line13-36). Since the expert system unit use information in the file to fix a problem, the expert system unit is considered as a maintenance terminal.

Furthermore, the new cited art of Ying discloses a method and system for diagnosis and maintenance vehicle, comprising: portable diagnostic terminal 730 remotely accessing the appropriate diagnostic and maintenance information stored in

Art Unit: 2685

the diagnostic and maintenance information database 780 (column 11 lines 13-25), wherein the portable diagnostic terminal is considered as a remotely maintenance terminal. Since the Ying's system wirelessly access the fault/diagnosis information stored in a database for troubleshooting a vehicle, it is obvious this technique can be applied to troubleshoot for a telephone system which is known to those skilled in the art.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Nguyen whose telephone number is (571) 272-7894. The examiner can normally be reached on Monday-Friday from 7:00 AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban, can be reached on (571) 272-7899.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
600 Dulany, Alexandria, VA 22314

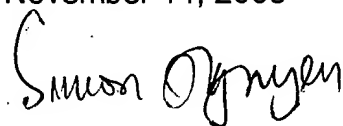
Or faxed to:

(703) 872-9314, (for formal communications intended for entry)

Hand-delivered response should be brought to Knox building,
501 Dulany, Alexandria, VA.

Simon Nguyen

November 14, 2005

A handwritten signature in cursive script that reads "Simon Nguyen".

**SIMON NGUYEN
PRIMARY EXAMINER**